

BOOK REVIEW

M.G. VAKHRAMEEVA, I.V. TATARENKO, T.I. VARLYGINA, G.K. TOROSYAN, AND M.N. ZAGULSKI. 2008. **Orchids of Russia and Adjacent Countries (within the borders of the former USSR)**. (ISBN 978-3-906166-61-2, hbk.). Koeltz Scientific Books, Koenigstein, Germany. (**Orders:** www.koeltz.com or www.orchidbooks.com). \$212.00, 690 pp., color distribution maps, photographs, and watercolor plates.

Orchids of Russia is a massive work that covers much of Eastern Europe and northern Asia and treats nearly all of the temperate terrestrial orchids to be found in that region. It is the first complete, modern scientific treatment of the orchid flora of the former USSR. The authors studied orchids for more than 30 years, in different climatic zones—polar regions of the Cola Peninsula, temperate zones in Central Russia, Central Ukraine, Baltic Sea coast territories, Mediterranean regions in the Crimea and Caucasus, continental climate in Siberia and Central Asia, and monsoonic climate in the Far East of Russia. The first several chapters consist of detailed essays by the various authors and are entitled History and Contemporary Tendencies in Orchid Studies, Systematic Review, Species Distribution, Ecology and Phytocoenology, Morphology, Ontogenesis, Rhythm of Seasonal Development and Reproduction, Mycorrhiza, and Species Protection. The bulk of the book is devoted to the species descriptions and they are very complete and easy to understand. Throughout the book extensive use of references is made, resulting in more than 70 pages in the bibliography. A brief glossary contains not only the technical terms but several Anglicized Russian terms that help in understanding the text. I now know that a *Zapovendik* is a highly protected area under government control that prohibits economic activities or a 'nature preserve'.

A work such as this is written over many years and, judging from the references, contains data through 2004. Several genera and species also found in North America are included, many of these quite rare and found especially in Alaska. It is helpful to have more information on these species. They include *Calypso bulbosa*, *Cypripedium guttatum*, *C. yatabeanum*, *Dactylorhiza aristata*, *Goodyera repens*, *Liparis loeselii*, *Listera cordata*, *Lysiella oligantha* (*Platanthera obtusata* subsp. *oligantha*), *Malaxis monophyllos*, *Platanthera convallariifolia*, *P. dilatata*, *P. chorisiana*, and *P. tipuloides*. Several of our non-native North American species are native in this region and include treatments of *Epipactis atrorubens*, *E. helleborine*, *E. palustris*, *Listera ovata*, and *Zeuxine strateumatica*. One of the most interesting treatments is in the use of the genera *Lysiella* as mentioned above and *Tulotis*. The latter would include the eastern North American *Platanthera flava*.

Many scientific works originally written in a language other than English often suffer greatly in translation, but no so with this book. The English is excellent and the proofreading exceptional. Over 200 color photos of the species are complemented by numerous excellent watercolors and supplemented by 18 line drawings and 93 distribution maps. It is here that the book has its only significant fault. No key map is provided for either the geography or showing the several ecological regions so often mentioned in the book. For those not intimately familiar with the many countries of the former USSR and their locations, this can be very confusing. If only one page were devoted to a simple outline map showing the borders of these countries it would make the book much more usable. Fortunately such a map is easily accessible on the internet, and I found an excellent one at www.theodora.com. The names of a few of the countries are slightly different from those used in the book, but easily understood. The map can be printed out and inserted within the book for reference. I highly recommend *Orchids of Russia* for all orchid professionals and enthusiasts with an interest in the native orchids of this region.—Paul Martin Brown, 10896 SW 90th Terrace, Ocala, Florida 34481, U.S.A., naorchid@aol.com.